5

1. A coaxial cable termination system comprising:

a coaxial cable having an electrically conductive core, an inner dielectric concentrically surrounding said core, and an electrically conductive shield concentrically surrounding said inner dielectric, wherein said core has an exposed core section, and wherein said shield has an exposed shield section;

an electrically conductive core body formed over said exposed core section and electrically connected thereto; and

an electrically conductive shield body formed over said exposed shield section and electrically connected thereto;

wherein said core body and said shield body mutually have direct current electrical isolation with respect to each.

- 2. The coaxial cable termination system of Claim 1, wherein said core body is cast over said exposed core section, and wherein said shield body is cast over said exposed shield section.
- 3. The coaxial cable termination system of Claim 2, wherein said coaxial cable further has an exposed inner dielectric section extending between said exposed core section and said exposed shield section; said coaxial cable termination system further comprising:

said exposed core section being disposed entirely inside said core body, wherein said core body encompasses a portion of said exposed inner dielectric section; and

the shield body encompassing a portion of said exposed inner dielectric section;

10

wherein said core and shield bodies are mutually separated a short distance at said exposed inner dielectric section, and wherein said coaxial cable substantially rigidly orients said core body and said shield body in substantially mutually parallel relation to said core locally thereat.

4. The coaxial cable termination of Claim 3, further comprising: a first electrical connection feature formed on said core body;

a second electrical connection feature formed on said shield

5 body;

and

wherein said first and second electrical connection features provide mutually electrically exclusive connection interfaces to respective electrical connection locations of at least one electrical component.

- 5. The coaxial cable termination system of Claim 4, further comprising a pair of guide pins depending from said shield body.
- 6. The coaxial cable termination system of Claim 4, wherein said core and shield bodies comprise an electrically conductive and castable metal.
- 7. The coaxial cable termination system of Claim 4, wherein said core and shield bodies comprise an electrically conductive and castable metal selected from the group consisting of a tin-antimony alloy, a tin-lead alloy, and zinc

8. A coaxial cable termination system comprising:

a coaxial cable having an electrically conductive core, an inner dielectric concentrically surrounding said core, an electrically conductive shield concentrically surrounding said inner dielectric, and a jacket concentrically surrounding said shield, wherein said core has an exposed core section, said shield has an exposed shield section, and wherein said inner dielectric has an exposed inner dielectric section extending between said exposed core section and said exposed shield section;

5

10

15

20

and

a core body castingly formed over said exposed core section and electrically connected thereto, said core body encompassing a portion of said exposed inner dielectric section, said exposed core section being disposed entirely inside said core body; and

a shield body castingly formed over said exposed shield section and electrically connected thereto, said shield body encompassing a portion of said exposed inner dielectric section and a portion of said jacket;

wherein said core and shield bodies are mutually separated a short distance at said exposed inner dielectric section, wherein said core and shield bodies mutually have direct current electrical isolation with respect to each other, and wherein said coaxial cable substantially rigidly orients said core body and said shield body in substantially mutually parallel relation to said core locally thereat.

9. The coaxial cable termination system of Claim 8, further comprising:

a first electrical connection feature formed on said core body;

5 a second electrical connection feature formed on said shield body;

wherein said first and second electrical connection features provide mutually electrically exclusive connection interfaces to respective electrical connection locations of at least one electrical component.

- 10. The coaxial cable termination system of Claim 9, wherein said core and shield bodies comprise an electrically conductive and castable metal.
- 11. The coaxial cable termination system of Claim 9, further comprising a pair of guide pins depending from said shield body.
- 12. The coaxial cable termination system of Claim 9, wherein said core and shield bodies comprise an electrically conductive and castable metal selected from the group consisting of a tin-antimony alloy, a tin-lead alloy, and zinc.
- 13. A method for providing an electrical termination of a coaxial cable, comprising the steps of:

exposing a portion of a core of a coaxial cable at the end thereof to thereby provide an exposed core section;

exposing a portion of a shield of the coaxial cable to thereby provide an exposed shield section;

5

exposing a portion of an inner dielectric of the coaxial cable to thereby provide an exposed inner dielectric section extending from the exposed core section to the exposed shield section; 10

15

casting electrically conductive material over the exposed core section to provide a core body, wherein the core body is electrically connected with the core and mechanically connected to the coaxial cable; and

casting electrically conductive material over the exposed shield section to form a shield body, wherein the shield body is electrically connected with the shield and mechanically connected to the coaxial cable;

wherein said first and second steps of casting result in the core and shield bodies mutually having direct current electrical isolation with respect to each other.

14. The method of Claim 13, wherein said steps of casting are performed simultaneously.